

The following listing replaces all prior listing of claims in the application.

1. (currently amended) A fuel composition comprising: a combustion improving amount of ~~a symmetrical dialkyl dimethyl~~ carbonate, a combustion improving amount of at least one combustible compound containing at least one element selected from the group consisting of aluminum, boron, bromine, bismuth, beryllium, calcium, cesium, chromium, cobalt, copper, francium, gallium, germanium, iodine, iron, indium, lithium, magnesium, manganese, molybdenum, nickel, niobium, phosphorus, potassium, palladium, rubidium, sodium, tin, zinc, praseodymium, rhenium, silicon, vanadium, strontium, barium, radium, scandium, yttrium, lanthanum, actinium, cerium, thorium, titanium, zirconium, hafium, praseodymium, protactinium, tantalum, neodymium, uranium, tungsten, promethium, neptunium, samarium, plutonium, ruthenium, osmium, europium, americium, rhodium, iridium, gadolinium, curium, platinum, terbium, berkelium, silver, gold, dysprosium, californium, cadmium, mercury, holmium, titanium, erbium, thulium, arsenic, antimony, ytterbium, selenium, tellurium, polonium, lutetium, astatine, mixture thereof, including organic and inorganic derivatives; optionally hydrogen or a hydrocarbon base fuel; ~~optionally an oxidizer; and optionally a co-metallic catalyst~~, wherein said fuel composition has a pH of from 4.5 to 10.5 and is a vapor phase composition characterized upon combustion as having a luminous reaction zone extending from surface of said ~~element~~. element, and wherein the combustible compound is selected from the group consisting of cyclopentadienyl manganese tricarbonyl, [2-(cyclohexenyl)ethyl]triethoxy-silane, cyclohexenyl dimethoxymethylsilane, benzyltrimethylsilane, N-(3-(trimethoxysilyl)propyl)ethylenediamine, N-1-(3-(trimethoxysilyl)propyl)diethylenetriamine, N-(3-(trimethoxysilyl)propyl)ethylenediamine, 1-(trimethyl(silyl)pyrrolidine, triphenylsilanol, octamethyltrisiloxane, 2,2,4,4,6,6-hexamethylcyclotrisilazane, hexamethylcyclotrisiloxane, hexamethyldisilane, 1,1,1,3,3,3-hexamethyl disilazane, hexamethyldisiloxane, hexamethyldi-silthiane, allyltributylsilane, tetraalkylsilanes, 3-aminopropyltriethoxy-silane, benzytrimethylsilane, benzytriethylsilane, N-benzyltrimethylsilyl-amine, diphenylsilanediol, dihexylsilanediol, (trimethylsilyl)cyclopentadi-ene, potassium hexacyanoferrate(II), potassium hexacyanoferrate(III), potassium

hexacyanocobalt II-ferrate, potassium hexacyanocobalt, potassium sodium ferricyanide, potassium ethoxide, and mixtures thereof.

2. (original) The fuel composition of claim 1, wherein the pH is less than 9.5.
3. (original) The fuel composition of claim 1, wherein the pH is less than 8.0.
4. (original) The fuel composition of claim 1, wherein the pH is from 6.3 to 6.8.
5. (cancelled)
6. (currently amended) The composition of claim 1 further comprising ~~containing~~ a co-metallic catalyst, selected from group consisting of trimethoxymethylsilane, ethoxytrimethylsilane, isobutyltriethoxysilane, tetramethylsilane, dimethoxy-methyl-vinyl-silane- , methyltriethoxysilane, 3-aminopropyltriethoxysilane, 3-aminopropyl-trimethoxysilane, vinyltrimethoxysilane, diethoxydimethylsilane, dimethoxydimethylsilane, vinyltris(2-butyl-denami- nooxy)silane, tetramethoxysilane, tetraethoxysilane, tetrapropyl-oxysilane, tetraisopropylsilane, tetraisobutylsilane, dimethylphosphite, dipropylphosphite, diethylphosphite, dibutylphosphite, di-tert-butyl-phosphite, trialkylphosphites trimethylphosphite, triethylphosphite, triisopropylphosphite, tributylphosphite), dimethylmethylphosphonate, diethylmethylphosphonate, potassium pryophosphite, trimethylorthoacetate, triethylorthoacetate, trimethylorthobutyrate, triethylorthobutyrate, trimethylorthovalerate, trimethylorthoformate, including homolgues, analogues, isomers, derivatives, and mixture thereof.
7. (cancelled)
8. (currently amended) The composition of claim 1, wherein the fuel composition ~~is an enhanced aviation turbine fuel composition wherein the dialogue carbonate is a C3 to C7 symmetrical dialkyl dicarbonate,~~ comprises an aviation turbine hydrocarbon base having a viscosity equal or exceeding 8.1 MM2/S, and the fuel composition is characterized as being acidic not exceeding equivalent of 0.1 mg KOH/g.

9. (currently amended) The composition of claim 1, wherein the fuel composition is a diesel fuel oil, ~~the dialkyl carbonate is dimethyl carbonate representing 0.01% to 40.0% oxygen by wt. of the fuel,~~ the hydrocarbon base fuel has a viscosity equal to or greater than 2.5, MM²/S at 40 °C., and the fuel composition is ~~characterized as having~~ has a pH less than 10.5 and a viscosity equal to or less than 2.4 MM²/S at 40 ° C.

10. (currently amended) A fuel composition of claim 1, wherein said composition is a gasoline comprising a lower dialkyl carbonate, characterized as having a pH less than 10.5, ~~and optionally being phosphorus free hydrocarbons,~~ with a maximum Reid Vapor Pressure of 12.0 psi, a maximum of 12% olefins, a maximum of 30% aromatics, a maximum of 2.0% benzene, a maximum of 50 ppm sulfur or sulfur free, a total O₂ concentration ranging from 0.5% to 10.0% wt of dialkyl carbonate, a combustible metal or non-metal selected from group consisting of cyclopentadienyl manganese tricarbonyl, [2-(cyclohexenyl)ethyl]triethoxysilane, cyclohexenyl dimethoxymethylsilane, benzyltrimethylsilane, N-(3-(trimethoxysilyl)propyl)ethylenediamine, N-1-(3-(trimethoxysilyl)propyl)diethylenetriamine, N-(3-(trimethoxysilyl)propyl)ethylenediamine, 1-(trimethyl(silyl)pyrroli- dine, triphenylsilanol, octamethyltrisiloxane, 2,2,4,4,6,6-hexamethylcyclo-trisilazane, hexamethylcyctrisiloxane, hexamethyldisilane, 1,1,1,3,3,3-hexamethyl disilazane, hexamethyldisiloxane, hexamethyldisilthiane, allyltributylsilane, tetraalkylsilanes, 3-aminopropyltriethoxy-silane, benzytrimethylsilane, benzytriethylsilane, N-benzyltrimethylsilyl-amine, diphenylsilanediol, dihexylsilanediol, (trimethylsilyl)cyclopenta-diene, potassium hexacyanoferrate(II), potassium hexacyanoferrate(III), potassium hexacyanocobalt II-ferrate, potassium hexacyanocobalt, potassium sodium ferricyanide, potassium ethoxide, or mixture, a maximum T-90 temperature of 330° F. to 280° F., a T-50 temperature of approx. 170° F. to 230° F., a minimum (R+M)/2 octane of 85 to 92, a bromine number of 20 or less, an average latent heat of vaporization of 880 to 920 BTU/gal at 60° F., a heating value greater than 106,000 btu/gal at 60° F.

11-12. (cancelled)